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June 28, 2000

# TERMS OF REFERENCE

## RTCA Special Committee SC-196
## Night Vision Goggle (NVG) Appliances & Equipment

### 1. REQUESTERS:


| Co-Chair | Vice Chair |
|---|---|
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### 2. COMMITTEE PRODUCTS / DUE DATES:

A. Operational Concept and Operational Requirements for NVG Implementation into the National Airspace System (NAS).....December 2000

B. Minimum Operational Performance Standards (MOPS) for Night Vision Goggles .....December 2000

C. Training Guidelines and Other Considerations for NVG Operators.....July 2001

### 3. TERMINATION OF COMMITTEE ACTIVITIES

Activities of Special Committee 196 will terminate with approval by the Program Management Committee (PMC) of the committee's final document listed in section two of this Terms of Reference. Any change/extension of a committee's work program requires prior PMC approval.

### 4. NAS ARCHITECTURE LINKAGE:

Although there is no linkage to the National Airspace System Architecture 4.0, a critical part of NAS modernization is incorporating emerging technologies. Night Vision Goggle equipment is an emerging technology that will enhance the safety margin of civil rotorcraft and small airplane operations. This

technology requires no support from or interaction with ground facilities and therefore places no additional requirements on the ground infrastructure outlined in the NAS Architecture plans.

## 5. REQUIREMENTS ASSESSMENT:

The FAA is in urgent need of Minimum Operation Performance Standard for Night Vision Goggle equipment. There are a limited number of night vision systems in use today, and additional equipment is in the design phase. These systems are in need of aeronautical information that is not readily available today. Night Vision Goggles provide a safer flying environment by allowing operator's to see more acutely at night, therefore enhancing situation awareness and reducing operator workload. At present, in order to use NVG's in piloting aircraft under FAA certification, an application for a Supplemental Type Certificate (STC) must be made by the user. This is an involved process that is specific to the user/user group, craft, and application/operation. To facilitate the ease of certifying Night Vision Goggles, this Special Committee has been formed to bring the industry and the FAA together to develop appropriate requirements that can be used within the FAA, as well as other governments and organizations.

## 6. TERMS OF REFERENCE:

The committee will work collaboratively to meet the following Terms of Reference:

A. The Operational Concept will describe intended uses. Operational Requirements for delivering the capabilities identified in the Operational Concept will be developed (e.g., aircraft type, weather, phase of flight, operator qualifications, additional aircraft equipment, ambient lighting conditions).

B. The Minimum Operational Performance Standard will specify Night Vision Imaging System performance requirements such as major components, controls and adjustments, binocular interface and performance, electrical interface, environmental characteristics, damage and degradation of performance, and inspection. The MOPS will also identify aircraft modification requirements needed for compatibility with and usage of NVGs, such as flight deck and instrument lighting, exterior lighting, flight instruments, installation, inspection, operation, electrical interface, and evaluation.

C. Coordinate with existing organizations, such as:
   - SAE G-10 and A-20.
   - FAA Flight Standards NVG Working Group
   - Appropriate DOD agencies such as the USAF Night Operations Working group

D. In developing the MOPS, the committee will consider the impact of the new standard on existing NVG equipment and NVIS installations.